=> d his

(FILE 'HOME' ENTERED AT 12:02:07 ON 02 MAY 2005)

FILE 'REGISTRY' ENTERED AT 12:02:16 ON 02 MAY 2005

L1 STRUCTURE UPLOADED

L2 3 S L1

L3 135 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 12:03:36 ON 02 MAY 2005

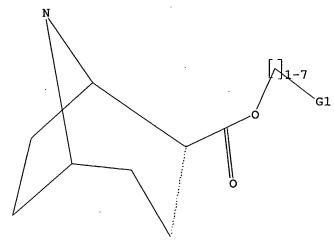
L4 39 S L3

L5 28 S L4 NOT PHOSPH?

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 O, S, N, X

Structure attributes must be viewed using STN Express query preparation.

=> d 1-28 bib abs hitstr

- L5 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2005:93034 CAPLUS
- DN 142:216950
- TI Fluorescent Cocaine Probes: A Tool for the Selection and Engineering of Therapeutic Antibodies
- AU Meijler, Michael M.; Kaufmann, Gunnar F.; Qi, Longwu; Mee, Jenny M.; Coyle, Avery R.; Moss, Jason A.; Wirsching, Peter; Matsushita, Masayuki; Janda, Kim D.
- CS Department of Chemistry and The Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, 92037, USA
- SO Journal of the American Chemical Society (2005), 127(8), 2477-2484 CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DT Journal

LA English

AB Cocaine is a highly addictive drug, and despite intensive efforts, effective therapies for cocaine craving and addiction remain elusive. recent years, we and others have reported advances in anti-cocaine immunopharmacotherapy based on specific antibodies capable of sequestering the drug before it reaches the brain. In an effort to obtain high affinity therapeutic anti-cocaine antibodies, either whole IgGs or other antibody constructs, fluorescence spectroscopic techniques could provide a means of assisting selection and engineering strategies. We report the synthesis of a series of cocaine-fluorophore conjugates (GNC-F1, GNC-F2, GNC-I) and the functional evaluation of these compds. against single-chain Fv antibodies obtained via crystallog. anal./engineering and against com. available anti-cocaine monoclonal antibodies with a wide range of cocaine-binding affinities. From these studies, we determined that the GNC-F2 fluorophore reproduced affinity consts. obtained using [3H]-labeled cocaine. We anticipate that the readily synthesized and nonradioactive GNC-F2 will find use both as a tool for bioimaging and in the high-throughput selection and engineering of potential therapeutic antibodies against cocaine.

IT 843660-56-0P 843660-57-1P 843660-58-2P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(fluorescent cocaine probes in selection and engineering of therapeutic antibodies)

RN 843660-56-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 6-[[6-[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]hexyl]amino]-6-oxohexyl ester, (1R,2R,3S,5S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A HO

PAGE 1-B

RN 843660-57-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 22-[2-(methylamino)phenyl]-6,22-dioxo-11,14,17-trioxa-7,21-diazadocos-1-yl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

$$-(CH2)3$$
H
O
NHMe

RN 843660-58-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 22-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]-6-oxo-22-thioxo-11,14,17-trioxa-7,21-diazadocos-1-yl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

PAGE 1-B

IT 173443-25-9P 173443-26-0P 173443-27-1P

843660-60-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(fluorescent cocaine probes in selection and engineering of therapeutic antibodies)

RN 173443-25-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-hydroxy-8-methyl-, 6-oxo-6-(phenylmethoxy)hexyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

$$Me \xrightarrow{R} O O O O O Ph$$

RN 173443-26-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 6-oxo-6-(phenylmethoxy)hexyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c}
R & O & (CH_2)_5 & O \\
\hline
N & S & O \\
\hline
N & S & O \\
\hline
Ph
\end{array}$$

RN 173443-27-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 5-carboxypentyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 843660-60-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 6-[(6-aminohexyl)amino]-6-oxohexyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:1155647 CAPLUS
- DN 142:341622
- TI Synthesis and biodistribution of [18F] FE@CIT, a new potential tracer for the dopamine transporter
- AU Mitterhauser, Markus; Wadsak, Wolfgang; Mien, Leonhard-Key; Hoepping, Alexander; Viernstein, Helmut; Dudczak, Robert; Kletter, Kurt
- CS Department of Nuclear Medicine, Medical University of Vienna, Austria
- SO Synapse (New York, NY, United States) (2004), Volume Date 2005, 55(2), 73-79
 - CODEN: SYNAET; ISSN: 0887-4476
- PB Wiley-Liss, Inc.
- DT Journal
- LA English
- AB In the last decade radiolabeled tropane analogs based on $\beta\textsc{-CIT}$ have proven indispensable for the imaging of the dopamine transporter. However, further improvements in their pharmacodynamic and pharmacokinetic features are desirable. An important improvement, yielding in higher affinity to the dopamine transporter (DAT) vs. serotonin transporter (SERT), can be achieved by a simple replacement of the carboxylic Me ester group in $\beta\textsc{-CIT}$ by a fluoroethyl ester. The preparation and ex vivo evaluation of this new $\beta\textsc{-CIT}$ -analog ([18F]FE@CIT) is presented here. Precursor and standard were prepared from $\beta\textsc{-CIT}$ and analyzed by spectroscopic methods. Yields of precursor and standard preparation were 61%

and

42%, resp. [18F]FE@CIT was prepared by distillation of [18F]bromofluoroethane ([18F]BFE) and reaction with (1R-2-exo-3-exo)8-methyl-3-(4-iodo-phenyl)-8-azabicyclo[3.2.1] octane-2-carboxylic acid. After 10 min at 150°C the product was purified using a C-18 SepPak. The radiosynthesis evinced radiochem. yields of >90% (based on [18F]BFE), the specific radioactivity was >416 GBq/μmol. An average 30 μAh cyclotron irradiation yielded more than 2.5 GBq [18F]FE@CIT. For the ex vivo bioevaluation, 20 male Sprague-Dawley rats were sacrificed at 5, 15, 30, 60, and 120 min after injection. Organs were removed, weighed, and counted. For autoradiog. expts., transverse brain slices of about 100 μm were prepared The ex vivo evaluation showed highest brain uptake in striatal regions, followed by thalamus and cerebellum. The highest striatum to cerebellum ratio was 3.73 and the highest thalamus to cerebellum ratio was 1.65. Autoradiog. images showed a good and differentiated uptake in striatal regions with a good target-to-background ratio.

IT 848396-43-0P

RL: DGN (Diagnostic use); PKT (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (synthesis and biodistribution of [18F] fluoroethyl ester of β -CIT, a new potential tracer for the dopamine transporter)

RN 848396-43-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-(fluoro-18F)ethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

IT 398497-81-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and biodistribution of [18F] fluoroethyl ester of β -CIT, a new potential tracer for the dopamine transporter)

RN 398497-81-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-fluoroethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:863118 CAPLUS

DN 142:38403

TI Synthesis and amine transporter affinities of novel phenyltropane derivatives as potential positron emission tomography (PET) imaging agents

AU Peng, Xuemei; Zhang, Ao; Kula, Nora S.; Baldessarini, Ross J.; Neumeyer, John L.

CS Medicinal Chemistry Laboratory, Alcohol and Drug Abuse Research Center, McLean Hospital, Harvard Medical School, Belmont, MA, 02478-9106, USA

SO Bioorganic & Medicinal Chemistry Letters (2004), 14(22), 5635-5639 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier B.V.

DT Journal LA English GI

HN CO₂R¹

Me_N CO2CH2CH2OTs

II

AB A series of novel fluoroalkyl-containing tropane derivs. were synthesized from cocaine. Novel compds. were evaluated for affinity and selectivity in competitive radioligand binding assays selective for cerebral serotonin (5-HT), dopamine (DA), and norepinephrine (NE) transporters (SERT, DAT, and NET). The nortropane-fluoroalkyl esters, I (R1 = (CH2)3F, R2 = Br; R1 = (CH2)2F, R2 = I), were most potent for SERT (Ki: 0.18, 0.24, and 0.30 nM, resp.). Tosylate esters, II (R2 = Br, I), synthesized as precursors for [18F]-labeled, Positron Emission Tomog. (PET) imaging agents, also showed high affinity for DAT.

IT 805255-23-6P 805255-27-0P 805255-30-5P
RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

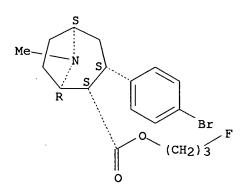
(preparation and transporter bonding affinity of fluoroalkyl-containing tropane

derivs.)

RN 805255-23-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-bromophenyl)-8-methyl-, 3-fluoropropyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 805255-27-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-bromophenyl)-8-methyl-, 2-fluoroethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

RN 805255-30-5 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-bromophenyl)-,
2-fluoroethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 805255-32-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-, 2-fluoroethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 805255-34-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-bromophenyl)-8-(2-fluoroethyl)-, 2-fluoroethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

RN 805255-44-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-bromophenyl)-8-methyl-, 2-[[(4-methylphenyl)sulfonyl]oxy]ethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 805255-46-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-[[(4-methylphenyl)sulfonyl]oxy]ethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 398497-81-9P 805255-21-4P 805255-40-7P 805255-42-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and transporter bonding affinity of fluoroalkyl-containing tropane

derivs.)

RN 398497-81-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-fluoroethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

RN 805255-21-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-bromophenyl)-8-methyl-, 3-[(methylsulfonyl)oxy]propyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 805255-40-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-bromophenyl)-8-methyl-, 2-hydroxyethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

RN 805255-42-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-hydroxyethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:515510 CAPLUS

DN 141:71754

TI Novel tropane esters and methods for producing and using them

IN Archer, Nicholas J.; Lewin, Anita H.

PA Entropin, Inc., USA

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

ran.	PATENT NO.					D,	DATE			APPLICATION NO.						DATE				
PI		WO 2004052888 WO 2004052888					20040624		1	WO 2	003-		20031205							
		0 2004052888				A3 20040812 B1 20041021														
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,			
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,			
		LK,	LR,	LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,			
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,			
		TM,	TN,	TR,	TT,	TZ,	UA,	ŬĠ,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW	: GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,			
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,			
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,			
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	MI	MR,	ΝE,	SN,	TD,	TG			
	US 2004171635						2004	0902	1	US 2	003-	7295		20031205						
PRAI	PRAI US 2002-431609P						2002	1205			1									
os	MARPAT	141:	7175	4													10			

phio appr

GI

AB This invention relates to novel primary diol tropane esters and related compds., including methods for making and using those compds. The compds. of this invention are those of formula I or II (R1 = H, aryl, arylalkyl, alkyl, alkenyl, alkynyl, -CO-alkyl, -CO-aryl, and -CO-arylalkyl; R2, R3 independently = H, branched or unbranched alkyl, alkenyl, alkenyl, and alkynyl; R4 = H, branched or unbranched alkyl, alkenyl, and alkynyl, aryl, arylalkyl; X = OH, SH, amino, halogen; Y = CO or nothing; n = 0-6). Thus, cocaine hydrochloride in concentrated HCl was refluxed overnight, filtered and washed with di-Et ether to yield ecgonidine hydrochloride which was treated with an excess of 1,3-propanediol to give 1-hydroxy-3-Pr ecgonidine. These compds. may be used as therapeutic and prophylactic agents against diseases such as immunoregulatory disorders, neuromuscular disorders, joint disorders, connective tissue disorders, circulatory disorders and pain.

IT 709666-32-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tropane esters as therapeutic agents for immunoregulatory disorders, neuromuscular disorders, joint disorders, connective tissue disorders, circulatory disorders and pain)

RN 709666-32-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 3-hydroxypropyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

IT 709666-31-9P 709666-33-1P 709666-34-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tropane esters as therapeutic agents for immunoregulatory disorders, neuromuscular disorders, joint disorders, connective tissue disorders, circulatory disorders and pain)

RN 709666-31-9 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-, 3-hydroxypropyl ester, (1R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me
$$\sim$$
 O (CH₂) 3 OH

RN 709666-33-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-hydroxy-8-methyl-, 3-hydroxypropyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 709666-34-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 3-hydroxypropyl ester, (1R,2R,3S,5S)-, sulfate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 709666-32-0 CMF C19 H25 N O5

CM 2

CRN 7664-93-9 CMF H2 O4 S

2004:182876 CAPLUS

140:235927

L5 AN

DN

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TI
     Process for preparing hydroxyalkyl tropane esters
     Lewin, Anita H.; Hayes, James P.; Zhong, Desong
IN
     Entropin, Inc., USA
PA
     PCT Int. Appl., 18 pp.
SO
     CODEN: PIXXD2
DΤ
     Patent
LА
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                         ____
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PΙ
     WO 2004018464
                         A1
                                20040304
                                           WO 2003-US26433
                                                                   20030821
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             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
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     US 2004171834
                         A1
                                20040902
                                           US 2003-646284
                                20020821
PRAI US 2002-405433P
                          Ρ
os
     CASREACT 140:235927
GI
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ANSWER 5 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

to

AB The present invention provides a method for preparing hydroxyalkyl tropane esters, such as I [dashed bond = single bond, double bond; R1 = H, OH, OCOPh; R2 = H, CH2OH; R3 = Me, CH(OH)Me], comprising: (a) contacting a tropane and 1,1'-carbonyldimidazole to produce an activated tropane ester; (b) contacting the activated tropane ester with an excess of an alkanediol to form a reaction mixture; and (c) maintaining the reaction mixture at a temperature and for a sufficient time for the activated tropane ester

to react with the alkanediol to form the corresponding hydroxyalkyl tropane ester. Thus, ecgonidine hydrochloride, obtained via refluxing cocaine hydrochloride with concentrated HCl, was reacted with 1,2-propanediol

afford 2-hydroxypropyl ecgonidine I [dashed bond = double bond, R1 = H, R2 = H, R3 = CH(OH)Me] and 1-hydroxy-2-Pr ecgonidine I [dashed bond = double bond, R1 = H, R2 = CH2OH, R3 = Me]. This method may be used to produce hydroxyalkyl derivs. of tropanes such as benzoylecgonine, ecgonine and ecgonidine.

528840-36-0P, 1-Hydroxy-2-propyl benzoylecgonine
528840-37-1P, 1-Hydroxy-2-propyl ecgonidine 611206-42-9P
, 2-Hydroxypropyl benzoylecgonine 611206-43-0P, 2-Hydroxypropyl
ecgonidine 666845-24-5P, 2-Hydroxypropyl ecgonine
666845-26-7P, 1-Hydroxy-2-propyl ecgonine
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
(Preparation)

(preparation of hydroxyalkyl tropane esters)

Т

RN 528840-36-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2-hydroxy-1-methylethyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 528840-37-1 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-, 2-hydroxy-1-methylethyl ester, (1R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 611206-42-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2-hydroxypropyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 611206-43-0 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-, 2-hydroxypropyl ester, (1R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} R & O & Me \\ \hline \\ N & OH \end{array}$$

RN 666845-24-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-hydroxy-8-methyl-, 2-hydroxypropyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

RN 666845-26-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-hydroxy-8-methyl-, 2-hydroxy-1-methylethyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:904276 CAPLUS

DN 141:111320

TI Determination of the Dermal Penetration of Esterom Components Using Microdialysis Sampling

AU McDonald, Sarah; Lunte, Craig

CS Department of Chemistry, University of Kansas, Lawrence, KS, 66045, USA

SO Pharmaceutical Research (2003), 20(11), 1827-1834 CODEN: PHREEB; ISSN: 0724-8741

PB Kluwer Academic/Plenum Publishers

DT Journal

LA English

AB Esterom Solution, an investigational pharmaceutical product, is derived from the esterification of benzoylmethylecgonine (cocaine) in 1,2 propanediol. The resulting solution contains a mixture of components. Esterom Solution is intended to be a topical analgesic to relieve pain and increase the range of motion in patients suffering from acute inflammation of the shoulder or back. Although the components of Esterom are known, the components that are responsible for analgesia have only recently been identified. The purpose of this research is to evaluate which components have the ability to penetrate the skin, how much actually penetrates, and if and/or how each component is metabolized and distributed locally. Linear microdialysis probes were implanted into rat dermis. The individual components present in the Esterom Solution were applied sep. to the dermis directly over a probe. Dermal dialysis samples were collected to evaluate

the dermal penetration of each compound following topical application. Following a 10 mg/50 μL application, 1.8±0.6 mM benzoic acid was detected at the plateau after approx. 220 min. Following hydroxypropyl benzoic acid application, complete hydrolysis to benzoic acid was observed with a plateau concentration of 137±19 μM (150 min plateau). When applied sep., hydroxypropyl benzoylecgonine and ecgonine penetrate the skin with plateau concns. of 32±9 μM (15 h plateau) and 36±5 μM (150 min plateau) resp. Benzoylecgonine, the hydrolytic product of HP-BE, was also detected with a plateau concentration of 3.9±0.1 μM (16 h plateau) Applied topically, ecgonidine, methylecgonidine, benzoylecgonine, and hydroxypropyl ecgonidine were not detected. Of the components with analgesic activity, the only compound that penetrates the skin is hydroxypropyl benzoylecgonine. Dermal microdialysis was shown to be an effective technique to monitor the skin penetration of topically applied compds.

IT 528840-36-0 528840-37-1 611206-42-9 611206-43-0

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(determination of dermal penetration of Esterom components using microdialysis

sampling)

RN 528840-36-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2-hydroxy-1-methylethyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 528840-37-1 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-, 2-hydroxy-1-methylethyl ester, (1R,5S)- (9CI) (CA INDEX NAME)

RN 611206-42-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2-hydroxypropyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 611206-43-0 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-, 2-hydroxypropyl ester, (1R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:503476 CAPLUS

DN 139:312548

TI Cyclodextrin-modified micellar electrokinetic chromatography for the analysis of esterom, a topical product consisting of hydrolyzed benzoylecgonine in propylene glycol

AU Razak, Jennifer L.; Doyen, Heidi J.; Lunte, Craig E.

CS Department of Chemistry, University of Kansas, Lawrence, KS, USA

SO Electrophoresis (2003), 24(11), 1764-1769 CODEN: ELCTDN; ISSN: 0173-0835

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

AB Esterom, a new drug currently in human clin. trials, is a mixture of compds. in a propylene glycol vehicle. It is being evaluated as a topical treatment to aid in the relief of muscle pain and to increase range of motion. Benzoylecgonine is the major component of esterom and there are

at least nine other minor constituents, including four hydroxypropyl esters that have multiple diastereomers. The aim of the study was to develop a capillary electrophoresis method for the simultaneous separation of the main components in Esterom, including the multiple proposed diastereomers of the esters. Due to the complex sample composition, the use of micelles and cyclodextrins as buffer modifiers was evaluated. A cyclodextrin-modified micellar electrokinetic chromatog. method was able to determine 7 of the 8 UV-active esterom components, with baseline separation

of 7 of the 10 diastereomers of the hydroxypropyl esters.

IT 611206-42-9 611206-43-0

RL: ANT (Analyte); ANST (Analytical study)
(determination of components of esterom by cyclodextrin-modified micellar electrokinetic chromatog.)

RN 611206-42-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2-hydroxypropyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 611206-43-0 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-, 2-hydroxypropyl ester, (1R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$Me \underbrace{\begin{array}{c} R \\ N \\ S \end{array}} O \underbrace{\begin{array}{c} O \\ OH \end{array}} Me$$

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:492188 CAPLUS

DN 139:77878

TI Preparation of tropanes, their rhenium and technetium chelates and use as

radiopharmaceuticals and diagnostic agents

IN Turpin, Frederic; Mauclaire, Laurent; Masri, Fadi; Riche, Francoise; Du Moulinet D'Hardemare, Amaury

Schering Aktiengesellschaft, Germany PA

SO Fr. Demande, 65 pp.

CODEN: FRXXBL

Patent DT

LА French

FAN.	CNT 1																		
	PATENT NO.					D	DATE			APPLICATION NO.						DATE			
PI	FR 2833952				A1	A1 20030627				FR 2	001-	1686		20011226					
	FR 2833952					B1 20040326													
	WO 2003055879					A2 20030710				WO 2002-IB5357						20021213			
	WO 2003055879			A3 20040617															
	W:	ΑE,	AG.	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
							DK,												
				•			IN,		-	-		-	-	-	-	-			
		•	•	•	•	•	MD,	•	•	-	•	•	•	•	•	•	-		
		•	•	•	•		SD,	-		•		-		•		-	-		
		-	-	-	-		VN,			•		•				,	•		
	RW:	GH,	•	•	•	•	•	•	•	•		UG.	7.M.	7.W .	AM.	A7.	BY.		
	1	•	•	•	•	•	TM,	•	-	-	-	•	-	-			-		
		•	•	-	•	-	IT,	•	-		-	-	-	•			-		
		•	-	•	•	•	•	•	•	•	•	•	•	•		DO,	UL ,		
DD 7 T	CG, CI, CM,			•	•			•	PIK,	NE,	3N,	ıυ,	10						
	PRAI FR 2001-16867				A		2001	1226											
os	OS MARPAT 139:77878																		
GI																			

The present invention concerns tropanes (shown as I; variables defined AΒ below; e.g. II), their metal chelates with rhenium and technetium (e.g. Tc oxo and nitrido complexes with II), methods of preparation of the tropanes and their chelates, and uses as radiopharmaceuticals and diagnostic agents,

e.g. visualization of reuptake of dopamine or serotonin. For I: X = acompound of chelation of a metal or a metal complex, carbons 6 and 7 being bonded or not; R1 is an alkyl or a alkenyl; R2 is COOZ (Z = H, alkyl); R3 = Ph, phenylalkyl or phenylalkenyl, benzoate or oxo; the connection between carbons 2 and 3 is a simple or double bond. The portions of X bonded to carbons 6 and 7 may be, for example, :NN(R7)CS2Me (R7 = H, Me). For example, II was prepared in a multistep synthesis starting from N-Bocpyrrole and (1S)-2-ethoxy-1-methyl-2-oxoethyl 3-(tertbutyldimethylsiloxy)-2-diazo-3-oxo-3-butenoate (prepns. described) involving the following intermediates: (1S)-2-ethoxy-1-methyl-2-oxoethyl (1R,5R)-8-[(1,1-dimethylethoxy)carbonyl]-3-(tert-butyldimethylsiloxy)-8azabicyclo[3.2.1]octa-2,6-diene-2-carboxylate (shown as III, 75%), (1S)-2-ethoxy-1-methyl-2-oxoethyl (1R, 5R)-8-[(1, 1-dimethylethoxy) carbonyl]-8-azabicyclo[3.2.1]oct-6-en-3-one-2-carboxylate, (1S)-2-ethoxy-1-methyl-2oxoethyl (1R,5R)-8-[(1,1-dimethylethoxy)carbonyl]-3-(trifluoromethanesulfonyloxy)-8-azabicyclo[3.2.1]octa-2,6-diene-2carboxylate (22%), (1S)-2-ethoxy-1-methyl-2-oxoethyl (1R,5R)-8-[(1,1-ethyl-2-oxoethyl)]dimethylethoxy)carbonyl]-3-(p-tolyl)-8-azabicyclo[3.2.1]octa-2,6-diene-2carboxylate (33%), Me (1R,5R)-8-[(1,1-dimethylethoxy)carbonyl]-3-(p-tolyl)-8-azabicyclo[3.2.1]octa-2,6-diene-2-carboxylate (95%), Me (1R, 2R, 3R, 5R) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - (p-tolyl) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - (p-tolyl) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - (p-tolyl) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - (p-tolyl) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - (p-tolyl) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - (p-tolyl) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - (p-tolyl) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - (p-tolyl) - 8 - [(1, 1-dimethylethoxy) carbonyl] - 3 - [(1, 1-dimethylethoxy) carbonyll] - 3 - [(1,azabicyclo[3.2.1]oct-6-ene-2-carboxylate (85%), Me (1R,2R,3R,5R,6R,7R)-8-[(1,1-dimethylethoxy)carbonyl]-6,7-dihydroxy-3-(p-tolyl)-8azabicyclo[3.2.1]octane-2-carboxylate (99%), and Me (1R,2R,3R,5R)-6-[(1,1dimethylethoxy)carbonyl]-1,5-diformyl-3-(p-tolyl)-6-azacyclohexane-2carboxylate (70%). Pharmacol. testing of Tc complexes of tropane derivs. yielded the following results: preinjection of GBR 12909 (specific inhibitor of dopamine transport) in rats prevented their fixation in the striatum; in vitro competitive studies on cerebral membranes with radiolabeled GBR 12925, paroxetine and nisoxetine showed the Tc complexes to have good affinity and specificity for dopamine transport; in vivo kinetic studies of cerebral distribution in a primate shows the complexes to be useful for visualization of dopamine transport; they pass the hemato-encephalic barrier and accumulate preferentially in the striatum with an elevated striatum/cerebellum ratio. 549506-13-0P 549506-14-1P 549506-15-2P

TΤ 549506-08-3P 549506-09-4P 549506-10-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tropanes, their rhenium and technetium chelates and use as radiopharmaceuticals and diagnostic agents)

RN 549506-08-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2,8-dicarboxylic acid, 6,7-dihydroxy-3-oxo-, 8-(1,1-dimethylethyl) 2-[(1S)-2-ethoxy-1-methyl-2-oxoethyl] ester, (1S, 5R, 6R, 7S) - (9CI) (CA INDEX NAME)

RN 549506-09-4 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2,8-dicarboxylic acid, 6,7-dihydroxy-3-[[(trifluoromethyl)sulfonyl]oxy]-, 8-(1,1-dimethylethyl) 2-[(1S)-2-ethoxy-1-methyl-2-oxoethyl] ester, (1S,5R,6R,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 549506-10-7 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2,8-dicarboxylic acid, 6,7-dihydroxy-3-(4-methylphenyl)-, 8-(1,1-dimethylethyl) 2-[(1S)-2-ethoxy-1-methyl-2-oxoethyl] ester, (1S,5R,6R,7S)- (9CI) (CA INDEX NAME)

RN 549506-13-0 CAPLUS

CN 4H-Cyclohepta-1,3-dioxol-4,8-imine-5,9-dicarboxylic acid, hexahydro-2,2-dimethyl-6-oxo-, 9-(1,1-dimethylethyl) 5-[(1S)-2-ethoxy-1-methyl-2-oxoethyl] ester, (3aS,4S,8R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 549506-14-1 CAPLUS

CN 4H-Cyclohepta-1,3-dioxol-4,8-imine-5,9-dicarboxylic acid,
3a,7,8,8a-tetrahydro-2,2-dimethyl-6-[[(trifluoromethyl)sulfonyl]oxy]-,
9-(1,1-dimethylethyl) 5-[(1S)-2-ethoxy-1-methyl-2-oxoethyl] ester,
(3aS,4S,8R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 549506-15-2 CAPLUS

CN 4H-Cyclohepta-1,3-dioxol-4,8-imine-5,9-dicarboxylic acid,
3a,7,8,8a-tetrahydro-2,2-dimethyl-6-(4-methylphenyl)-,
9-(1,1-dimethylethyl) 5-[(1S)-2-ethoxy-1-methyl-2-oxoethyl] ester,
(3aS,4S,8R,8aR)- (9CI) (CA INDEX NAME)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:396882 CAPLUS

DN 138:401953

TI Novel benzoylecgonine compositions and methods for producing them

IN Archer, Nicholas James

PA Entropin, Inc., USA

SO PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

FAN.	FAN.CNT 1 PATENT NO. KINI							DATE		٠.	APPL:	ICAT	DATE							
ΡI	WO	0 2003042209				A1	A1 20030522			WO 2002-US36384						20021113				
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GΕ,	GH,		
								IN,												
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,	,	
			PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,		
			ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW							
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
			KG,	ΚZ,	MD,	.RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,		
			FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,		
		•	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG					
	US 2003144317							2003	0731	•	US 2	002-		20021113						
	US 6790857							2004	0914											
	EP 1444230					A1 20040811			0811	EP 2002-789620						20021113				
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK				
	JP	2005	5090	35		Т2		20050407 JP 2003-544045												
PRAI	AI US 2001-348882P P																			
		2002																		
AB	B This invention provides							a method for preparing a benzoylecgo												

comprising the steps of: (a) contacting benzoylmethylecgonine and propylene glycol in the presence or absence of water to form a reaction mixture; (b) maintaining the reaction mixture at a temperature between about 50° and 100° C; and (c) subsequently or simultaneously removing water from the reaction mixture. This invention also provides novel benzoylecgonine and methods for producing them.

IT 528840-36-0P 528840-37-1P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(process for preparation of benzoylecgonine derivs. from cocaine and propylene glycol)

RN 528840-36-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2-hydroxy-1-methylethyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 528840-37-1 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-, 2-hydroxy-1-methylethyl ester, (1R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:162625 CAPLUS

DN 139:77836

TI S-Trityl protection of bis-amino bis-thiol (BAT) chelator enables flexible derivatisation and facile labelling with technetium-99m

AU Cleynhens, Bernard J.; Bormans, Guy M.; Vanbilloen, Hubert P.; Vanderghinste, Dominique V.; Kieffer, Davy M.; de Groot, Tjibbe J.;

Verbruggen, Alfons M.

- CS Laboratory for Radiopharmaceutical Chemistry and Nuclear Medicine, University of Leuven, Louvain, B-3000, Belg.
- SO Tetrahedron Letters (2003), 44(12), 2597-2600 CODEN: TELEAY; ISSN: 0040-4039
- PB Elsevier Science Ltd.
- DT Journal
- LA English
- OS CASREACT 139:77836
- The authors have coupled S,S'-bis-trityl N-BOC protected 1,2-ethylenedicysteamine, a bis-amino bis-thiol (BAT) tetraligand, via a propylene or ethylene spacer to several biol. active mols. including 2-nitroimidazole, desethylflumazenil, a beta-CIT analog, glucose and 2-(2'-hydroxy-4'-aminophenyl)-1,3-benzothiazole. The conjugates were efficiently labeled with 99mTc by consecutive heating of the S,S'-bis-trityl protected ligand in HCl followed by neutralisation and heating in the presence of 99mTc-tartrate. The S,S'-bis-trityl BAT chelator is an interesting synthon that allows both flexible derivatisation with various biol. active mols. and facile labeling with Tc-99m.
- IT 549514-77-4P

RN 549514-77-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, 3-[[2-[[(1,1-dimethylethoxy)carbonyl][2-[(triphenylmethyl)thio]ethyl]amino]ethyl][2-[(triphenylmethyl)thio]ethyl]amino]propyl ester, (1R,2S,3S,5S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2002:787415 CAPLUS
- DN 138:319388
- TI Anticocaine catalytic antibodies
- AU Deng, Shi Xian; de Prada, Paloma; Landry, Donald W.
- CS Department of Medicine, Division of Clinical Pharmacology and Experimental Therapeutics, Columbia University, New York, NY, 10032, USA
- SO Journal of Immunological Methods (2002), 269(1-2), 299-310 CODEN: JIMMBG; ISSN: 0022-1759
- PB Elsevier Science B.V.

DT Journal

LA English

AB Cocaine mediates its reinforcing and toxic actions through a "loss of function" effect at multiple receptors. The difficulties inherent in blocking a pleiotropic blocker pose a great obstacle for the classical receptor-antagonist approach and have contributed to the failure (to date) to devise specific treatments for cocaine overdose and addiction. As an alternative, we have embarked on an investigation of catalytic antibodies, a programmable class of artificial enzyme, as "peripheral blockers"-agents designed to bind and degrade cocaine in the circulation before it partitions into the central nervous system to exert reinforcing or toxic effects. We synthesized transition-state analogs of cocaine's hydrolysis at its benzoyl ester, immunized mice, prepared hybridomas and developed the first anticocaine catalytic antibodies with the capacity to degrade cocaine to nonreinforcing, nontoxic products. We subsequently identified several families of anticocaine catalytic antibodies and found that the most potent antibody possessed sufficient activity to block cocaine-induced reinforcement, organ dysfunction and sudden death in rodent models of addiction, toxicity and overdose, resp. With the potential to promote cessation of use, prolong abstinence and provide a treatment for acute overdose, the artificial enzyme approach comprehensively responds to the problem of cocaine.

IT 324015-66-9P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(anticocaine catalytic antibodies alter cocaine hydrolysis and toxicity)

RN 324015-66-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(hydroxyphenylphosphinyl)oxy]-8-methyl-, 4-[(3-carboxy-1oxopropyl)amino]butyl ester, (1R, 2R, 3S, 5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 152241-57-1P 152241-60-6P 152241-61-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(in preparation of cocaine transition state analogs)

RN 152241-57-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(methoxyphenylphosphinyl)oxy]-8-methyl-, 4-[(3-carboxy-1oxopropyl)amino]butyl ester, (1R, 2R, 3S, 5S)- (9CI) (CA INDEX NAME)

RN 152241-60-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-hydroxy-8-methyl-, 4-azidobutyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 152241-61-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(methoxyphenylphosphinyl)oxy]-8-methyl-, 4-azidobutyl ester,
(1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:872207 CAPLUS

DN 136:167538

TI Synthesis and binding affinities of 2β -(3-iodoallyloxycarbonyl)- 3β -(4-substituted-aryl)tropane analogues as ligands for the dopamine transporter studies

AU Chung, Kyoo-Hyun; Lim, Choong Hwan; Lee, Dong Reyoul; Jin, Changbae; Chi, Dae Yoon

CS Department of Chemistry, Inha University, Namgu, Inchon, 402-751, S. Korea

SO Bioorganic & Medicinal Chemistry Letters (2001), 11(23), 3077-3080 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

DT Journal

LA English

OS CASREACT 136:167538

GI

Me H
$$CO_2$$
 I $p-C_6H_4R$

AB Tropane analogs from cocaine, which is known to be one of the most reinforcing and addictive compds., were designed, synthesized, and characterized for inhibition of presynaptic uptake of dopamine (DA) in brain. Eight new derivs. of 3β -aryl- 2β -(3-iodoallyloxycarbonyl)tropanes, e.g. I ((E)-, R = H; (Z)-, R = F) were synthesized and tested for their potential abilities to displace [3H] 2β -carbomethoxy- 3β -(4-fluorophenyl)tropane (WIN 35,428) binding to the rat striatal membranes.

IT 396726-06-0P 396726-14-0P 396726-15-1P 396726-16-2P 396726-17-3P 396726-18-4P 396726-19-5P 396726-20-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and binding affinities of (E)- and (Z)-2 β -(3-iodoallyloxycarbonyl)-3 β -aryltropane derivs. for the dopamine transporter)

RN 396726-06-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-phenyl-, (2E)-3-iodo-2-propenyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 396726-14-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, (2E)-3-iodo-2-propenyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 396726-15-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-8-methyl-, (2E)-3-iodo-2-propenyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 396726-16-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, (2E)-3-iodo-2-propenyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 396726-17-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-phenyl-, (2Z)-3-iodo-2-propenyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 396726-18-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, (2Z)-3-iodo-2-propenyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

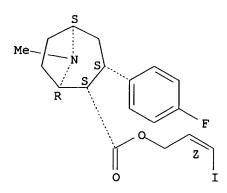
RN 396726-19-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-8-methyl-,

(2Z)-3-iodo-2-propenyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

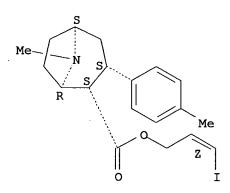


RN 396726-20-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, (2Z)-3-iodo-2-propenyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2001:872201 CAPLUS
- DN 136:183977
- TI Synthesis and biological evaluation of a series of novel N- or O-fluoroalkyl derivatives of tropane: potential positron emission tomography (PET) imaging agents for the dopamine transporter
- AU Gu, Xiao-Hui; Zong, Rushi; Kula, Nora S.; Baldessarini, Ross J.; Neumeyer, John L.
- CS Medicinal Chemistry Laboratory, Alcohol and Drug Abuse Research Center, Belmont, MA, 02478-9106, USA
- SO Bioorganic & Medicinal Chemistry Letters (2001), 11(23), 3049-3053 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

DT Journal LA English

OS CASREACT 136:183977

GΙ

$$R^3$$
 R^2 R^2

As series of novel fluoroalkyl-containing tropane derivs. was synthesized, and their binding affinities for the dopamine transporter (DAT), serotonin transporter (SERT), and norepinephrine transporter (NET) were determined via competitive binding assays. Among these derivs., the fluoropropyl ester of β -CIT (I; R1 = CO2(CH2)3F; R2 = I; R3 = Me), the fluoroethyl ester of β -CIT I (R1 = CO2(CH2)2F; R2 = I; R3 = Me), the N-fluoropropyl derivative of β -CBT I (R1 = CO2Me; R2 = Br; R3 = (CH2)3F), and the fluoropropyl ester of β -CMT I (R1 = CO2(CH2)3F; R2,R3 = Me) displayed higher affinity and greater selectivity for the DAT vs. SERT and NET than FP-CIT, which indicates that they are attractive candidates for the development of 18F-labeled PET imaging agents for the DAT.

IT 398497-77-3P 398497-79-5P 398497-81-9P 398497-84-2P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis and monoamine transporter binding affinity of fluoroalkyl containing tropane derivs.)

RN 398497-77-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, 3-fluoropropyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 398497-79-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-,

3-fluoropropyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me
$$N$$
 S C $CH_2)_3$ F

RN 398497-81-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-fluoroethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 398497-84-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-(3-fluoropropyl)-3-(4-iodophenyl)-, 2-fluoroethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

IT 398497-73-9P 398497-75-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and monoamine transporter binding affinity of fluoroalkyl containing tropane derivs.)

RN 398497-73-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, 3-[(methylsulfonyl)oxy]propyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 398497-75-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 3-[(methylsulfonyl)oxy]propyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:137949 CAPLUS

DN 135:40863

TI Biophysical characterization of the cocaine binding pocket in the serotonin transporter using a fluorescent cocaine analogue as a molecular reporter

AU Rasmussen, Soren G. F.; Carroll, F. Ivy; Maresch, Martin J.; Jensen, Anne Dam; Tate, Christopher G.; Gether, Ulrik

CS Division of Cellular and Molecular Physiology, Department of Medical Physiology, The Panum Institute, University of Copenhagen, Copenhagen N, DK-2200, Den.

SO Journal of Biological Chemistry (2001), 276(7), 4717-4723 CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

AB To explore the biophys. properties of the binding site for cocaine and related compds. in the serotonin transporter SERT, a high affinity cocaine analog 3β -(4-methylphenyl)tropane- 2β -carboxylic acid N-(N-methyl-N-(4-nitrobenzo-2-oxa-1,3-diazol-7-yl)ethano lamine ester hydrochloride (RTI-233); KI = 14 nM) that contained the environmentally sensitive fluorescent moiety 7-nitrobenzo-2-oxa-1,3-diazole (NBD) was synthesized. Specific binding of RTI-233 to the rat serotonin transporter, purified from Sf-9 insect cells, was demonstrated by the competitive inhibition of fluorescence using excess serotonin, citalopram, or RTI-55 (2β -carbomethoxy- 3β -(4-iodophenyl)tropane). Moreover, specific binding was evidenced by measurement of steady-state fluorescence anisotropy, showing constrained mobility of bound RTI-233 relative to RTI-233 free in solution The fluorescence of bound RTI-233 displayed an emission maximum (λ max) of 532 nm, corresponding to a 4-nm blue shift as compared with the λ max of RTI-233 in aqueous solution and corresponding to the \(\lambda\)max of RTI-233 in 80% dioxane. Collisional quenching expts. revealed that the aqueous quencher potassium iodide was able to quench the fluorescence of RTI-233 in the binding pocket (KSV = 1.7 M-1), although not to the same extent as free RTI-233 (KSV = 7.2 M-1). Conversely, the hydrophobic quencher 2,2,6,6-tetramethylpiperidine-N-oxyl (TEMPO) quenched the fluorescence of bound RTI-233 more efficiently than free RTI-233. These data are consistent with a highly hydrophobic microenvironment in the binding pocket for cocaine-like uptake inhibitors. However, in contrast to what has been observed for small-mol. binding sites

in, for example, G protein-coupled receptors, the bound cocaine analog was still accessible for aqueous quenching and, thus, partially exposed to solvent.

IT 344606-91-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(biophys. characterization of the cocaine binding pocket in the serotonin transporter using a fluorescent cocaine analog as a mol. reporter)

RN 344606-91-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, 2-[methyl(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]ethyl ester, monohydrochloride, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2000:68946 CAPLUS
- DN 132:251272
- TI Synthesis, Biodistribution, and Primate Imaging of Fluorine-18 Labeled 2β -Carbo-1'-fluoro-2-propoxy-3 β -(4-chlorophenyl)tropanes. Ligands for the Imaging of Dopamine Transporters by Positron Emission Tomography
- AU Xing, Dongxia; Chen, Ping; Keil, Robert; Kilts, Clinton D.; Shi, Bing; Camp, Vernon M.; Malveaux, Gene; Ely, Timothy; Owens, Michael J.; Votaw, John; Davis, Margaret; Hoffman, John M.; BaKay, Roy A. E.; Subramanian, Thygarajan; Watts, Ray L.; Goodman, Mark M.
- CS Emory Center for Positron Emission Tomography and Departments of Radiology Psychiatry and Behavior Sciences Neurology and Neurosurgery, Emory University, Atlanta, GA, 30320, USA
- SO Journal of Medicinal Chemistry (2000), 43(4), 639-648

CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society

DT Journal

chlorophenyl)tropane ((S)-FIPCT) were prepared and evaluated in vitro and in vivo for dopamine transporter (DAT) selectivity and specificity. High specific activity [18F](R)-FIPCT and [18F](S)-FIPCT were synthesized in 5% radiochem. yield (decay-corrected to end of bombardment (EOB)) by preparation

of the

precursors 2β -carbo-R-1-mesyloxy-2-propoxy- 3β -(4chlorophenyl)tropane and 2β-carbo-S-1-mesyloxy-2-propoxy-3β-(4chlorophenyl)tropane followed by treatment with no carrier-added potassium[18F]fluoride and kyrptofix K222 in acetonitrile. Competition binding in cells stably expressing the transfected human DAT and serotonin transporter (SERT) labeled by [3H]WIN 35428 and [3H]citalopram, resp., demonstrated the following order of DAT affinity (Ki in nM): GBR 12909 (0.36) > CIT (0.48) > (S) - FIPCT (0.67) > (R) - FIPCT (3.2). The affinity of (S)-FIPCT and (R)-FIPCT for SERT was 127- and 20-fold lower, resp., than for DAT. In vivo biodistribution studies were performed in male rats and demonstrated that the brain uptake of [18F](R)-FIPCT and [18F](S)-FIPCT were selective and specific for DAT rich regions (caudate and putamen). PET brain imaging studies in monkeys demonstrated high [18F](R)-FIPCT and [18F](S)-FIPCT uptake in the caudate and putamen which resulted in caudate-to-cerebellum and putamen-to-cerebellum ratios of 2.5-3.5 at 115 min. [18F](R)-FIPCT uptake in the caudate/putamen achieved transient equilibrium at 75 min. In an imaging experiment with [18F](S)-FIPCT

in a

rhesus monkey with its left hemisphere lesioned with MPTP, radioactivity was reduced to background in the caudate and putamen of the lesioned hemisphere. The high specific activity one-step radiolabeling preparation and high specificity and selectivity of [18F](R)-FIPCT and [18F](S)-FIPCT for DAT indicate [18F](R)-FIPCT and [18F](S)-FIPCT are potential radioligands for mapping brain DAT in humans using PET.

IT 262423-87-0P 262423-88-1P 262423-89-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis, biodistribution, and primate imaging of fluorine-18 labeled 2β -carbo-1'-fluoro-2-propoxy-3 β -(4-chlorophenyl)tropanes, ligands for imaging of dopamine transporters by positron emission tomog.)

RN 262423-87-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, (1R)-2-(fluoro-18F)-1-methylethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

RN 262423-88-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, (1S)-2-(fluoro-18F)-1-methylethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 262423-89-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, 2-(fluoro-18F)-1-methylethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S \\ N \\ S \\ \hline \\ O \\ Me \\ \end{array}$$

IT 262423-85-8P 262423-86-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis, biodistribution, and primate imaging of fluorine-18 labeled 2β -carbo-1'-fluoro-2-propoxy-3 β -(4-chlorophenyl)tropanes, ligands for imaging of dopamine transporters by positron emission tomog.)

RN 262423-85-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, (1R)-2-fluoro-1-methylethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 262423-86-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, (1S)-2-fluoro-1-methylethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 262423-82-5P 262423-84-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis, biodistribution, and primate imaging of fluorine-18 labeled 2β -carbo-1'-fluoro-2-propoxy-3 β -(4-chlorophenyl)tropanes, ligands for imaging of dopamine transporters by positron emission

tomog.)
RN 262423-82-5 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-,
(1R)-1-methyl-2-[(methylsulfonyl)oxy]ethyl ester, (1R,2S,3S,5S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 262423-84-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-,
(1S)-1-methyl-2-[(methylsulfonyl)oxy]ethyl ester, (1R,2S,3S,5S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

IT 262423-80-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis, biodistribution, and primate imaging of fluorine-18 labeled 2β-carbo-1'-fluoro-2-propoxy-3β-(4-chlorophenyl)tropanes, ligands for imaging of dopamine transporters by positron emission tomog.)

RN 262423-80-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, 2-fluoro-1-methylethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

Me
$$N$$
 S $C1$ CH_2F O Me

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:705039 CAPLUS

DN 131:318871

TI Catalytic antibodies against cocaine

IN Landry, Donald W.; Zhao, Kang

PA The Trustees of Columbia University in the City of New York, USA

SO U.S., 39 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
					
PI PRAI	US 5977314 US 1995-477300	A	19991102 19950607	US 1995-477300	19950607

OS MARPAT 131:318871

AB This invention provides compds. which are analogs to the hydrolysis transition-state of a cocaine benzoyl ester group. This invention also provides such analogs linked to carrier proteins, and antibodies thereto. This invention further provides pharmaceutical composition for decreasing concentration in a subject using the antibodies produced.

RN 248959-66-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-[(2-furanylmethoxyphosphinyl)oxy]-8-methyl-, 4-[(3-carboxy-1-oxopropyl)amino]butyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Me
$$N$$
 S P O P O CO_2H

RN 248959-67-3 CAPLUS

CN Pyridinium, 2-[[[(1R,2R,3S,5S)-2-[[4-[(3-carboxy-1-oxopropyl)amino]butoxy]carbonyl]-8-methyl-8-azabicyclo[3.2.1]oct-3-yl]oxy]methoxyphosphinyl]-1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 248959-69-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-[(2-furanylhydroxyphosphinyl)oxy]-8-methyl-, 4-[(3-carboxy-1-oxopropyl)amino]butyl ester, ion(1-), (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Me
$$N$$
 S P O CO_2H

RN 248959-70-8 CAPLUS

CN Pyridinium, 2-[[[(1R,2R,3S,5S)-2-[[4-[(3-carboxy-1-oxopropyl)amino]butoxy]carbonyl]-8-methyl-8-azabicyclo[3.2.1]oct-3-yl]oxy]hydroxyphosphinyl]-1-methyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 248959-64-ODP, reaction products with primary amines of carrier protein

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of antibodies and catalytic antibodies against cocaine)

RN 248959-64-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(hydroxyphenylphosphinyl)oxy]-8-methyl-, 4-[[4-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)oxy]-1,4-dioxobutyl]amino]butyl ester, ion(1-),
(1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 152241-57-1P 152241-60-6P 152241-61-7P 152241-62-8P 248959-63-9P 248959-64-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of antibodies and catalytic antibodies against cocaine)

RN 152241-57-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-

[(methoxyphenylphosphinyl)oxy]-8-methyl-, 4-[(3-carboxy-1-oxopropyl)amino]butyl ester, (1R, 2R, 3S, 5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 152241-60-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-hydroxy-8-methyl-, 4-azidobutyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 152241-61-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(methoxyphenylphosphinyl)oxy]-8-methyl-, 4-azidobutyl ester,
(1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 152241-62-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-

[(methoxyphenylphosphinyl)oxy]-8-methyl-, 4-aminobutyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 248959-63-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(methoxyphenylphosphinyl)oxy]-8-methyl-, 4-[[4-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)oxy]-1,4-dioxobutyl]amino]butyl ester, (1R,2R,3S,5S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 248959-64-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(hydroxyphenylphosphinyl)oxy]-8-methyl-, 4-[[4-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)oxy]-1,4-dioxobutyl]amino]butyl ester, ion(1-),
(1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:505661 CAPLUS

DN 131:157708

Methods for controlling invertebrate pests using cocaine receptor binding ΤI ligands

IN Kuhar, Michael J.; Carroll, Frank I.; Boja, John W.; Lewin, Anita H.; Abraham, Philip

PA Research Triangle Institute, USA

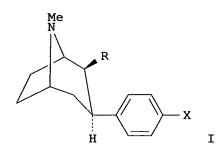
U.S., 58 pp. so CODEN: USXXAM

DTPatent

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	US	US 6531483			B1	200	30311	US	1996-	-7062	63		19	9960	904		
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	WO 9807427			A1	199	80226	WO	1997-	-US14	702	19970822						
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			ΙE,														
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		1996-						60822									
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		1991-						10809									
	US	1991-	-7926	548		В2	199	11115									

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	US 1993-164576	A2	19931210
	US 1997-823563	Α	19970325
	WO 1997-US14702	W	19970822
OS	MARPAT 131:157708		
CT			



AB Tropane derivs. such as I (R = heterocyclyl; X = Cl, Me) were prepared as inhibitors of a phenylethanolamine reuptake transporter in invertebrate pests. Thus, refluxing 2 mmol 3β -(4-chlorophenyl)tropane- 2β -carboxylic acid in 2 mL POCl3 with 2.2 mmol benzoic acid hydrazide 2 h gave a 42% yield of I (R = 5-phenyl-1,3,4-oxadiazol-2-yl, X = Cl). The IC50 values at dopamine, serotonin, and norepinephrine receptors were determined

IT 236753-85-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

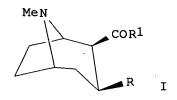
(controlling invertebrate pests by using cocaine receptor binding ligands)

RN 236753-85-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, 2-[methyl(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]ethyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 18 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN 1997:253997 CAPLUS AN DN 126:238537 ΤI Preparation of labeled cocaine analogs Goodman, Mark M.; Shi, Bing Zhi; Keil, Robert N. TN Emory University, USA; Goodman, Mark M.; Shi, Bing Zhi; Keil, Robert N. PA SO PCT Int. Appl., 37 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----_____ PΙ WO 9706832 **A**1 19970227 WO 1996-US13471 19960812 W: AU, CA, JP, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 5864038 Α 19990126 US 1995-512516 19950817 AU 9672348 **A**1 19970312 AU 1996-72348 19960812 US 5888475 Α 19990330 US 1997-948791 19971010 PRAI US 1995-512516 Α 19950817 WO 1996-US13471 W 19960812



OS GI MARPAT 126:238537

The labeled cocaine analogs I (R = Ph, naphthyl, iodo or trimethylsilyl substituted Ph or naphthyl; Rl = fluoroalkoxy, methanesulfonyloxyalkoxy; the iodo or fluoro may be radio-labeled) were prepared as agents useful for diagnostic imaging of the brain, in particular those regions having dopaminergic neurons. Such imaging is useful for differential diagnosis of Parkinson's disease and for the monitoring of addictive disorders related to abuse of cocaine and treatment thereof. Thus, I (R = 4-IC6H4, Rl = CO2CHMeCH2O3SMe), prepared in 4 steps from (-)-anhydroecoginie Me ester, was treated with treated with K18F to give I (R = 4-IC6H4, Rl = CO2CHMeCH218F) (II). The distribution of radioactivity in tissues of unfasted Sprague Dawley rats following i.v. administration of II was determined IT 188425-12-9P

RN 188425-12-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-,

2-(fluoro-18F)-1-methylethyl ester, [1R-(1 α ,2 α ,3 α ,5.alph a.)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-[4-(trimethylsilyl)phenyl]-, 2-fluoro-1-methylethyl ester, [1R-(1α,2α,3α,5α)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} S \\ \hline N \\ S \\ \hline \\ C \\ H \\ 2 \\ F \\ \hline \\ \\ O \\ Me \\ \end{array}$$

RN 188425-14-1 CAPLUS CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 1-methyl-2-[(methylsulfonyl)oxy]ethyl ester, [1R- $(1\alpha, 2\alpha, 3\alpha, 5\alpha)$]-[partial]- (9CI) (CA INDEX NAME)

RN 188425-15-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-[4-(trimethylsilyl)phenyl]-, 2-fluoro-1-(fluoromethyl)ethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 188425-17-4 CAPLUS CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-[4-(tributylstannyl)phenyl]-, 2-fluoro-1-methylethyl ester, [1R-(1 α , 2 α , 3 α , 5 α)]-[partial]- (9CI) (CA INDEX NAME)

RN 188425-22-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-[4-(trimethylsilyl)phenyl]-, 2-fluoro-1-methylethyl ester, $[1R-[1\alpha,2\alpha(R^*),3\alpha,5\alpha]]-$ (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 188425-23-2 CAPLUS CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-[4-(trimethylsilyl)phenyl]-, 2-fluoro-1-methylethyl ester, $[1R-[1\alpha,2\alpha(S^*),3\alpha,5\alpha]]- (9CI) \quad (CA \ INDEX \ NAME)$

IT 188425-16-3P 188425-18-5P 188425-19-6P 188425-20-9P 188425-21-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of labeled cocaine analogs as imaging agents)

RN 188425-16-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-fluoro-1-(fluoromethyl)ethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me
$$N$$
 S I CH_2F

RN 188425-18-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-[4-(iodo-123I)phenyl]-8-methyl-, 2-fluoro-1-methylethyl ester, [1R-(1 α ,2 α ,3 α ,5.a lpha.)]-[partial]- (9CI) (CA INDEX NAME)

RN 188425-19-6 CAPLUS CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-fluoro-1-methylethyl ester, [1R-(1 α ,2 α ,3 α ,5 α)]- [partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

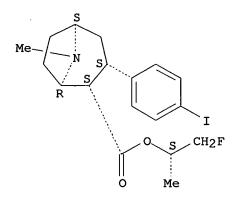
Me
$$\frac{S}{R}$$
 $\frac{S}{S}$ $\frac{S}{O}$ $\frac{CH_2F}{Me}$

RN 188425-20-9 CAPLUS CN 8-Azabicyclo[3:2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-fluoro-1-methylethyl ester, [1R-[1 α ,2 α (R*),3 α ,5 α]]- (9CI) (CA INDEX NAME)

RN 188425-21-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-iodophenyl)-8-methyl-, 2-fluoro-1-methylethyl ester, [1R-[1 α ,2 α (S*),3 α ,5 α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- L5 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 1997:88844 CAPLUS
- DN 126:171751
- TI Enantioselective Synthesis of Functionalized Tropanes by Rhodium(II) Carboxylate-Catalyzed Decomposition of Vinyldiazomethanes in the Presence of Pyrroles
- AU Davies, Huw M. L.; Matasi, Julius J.; Hodges, L. Mark; Huby, Nicholas J. S.; Thornley, Craig; Kong, Norman; Houser, Jeffrey H.
- CS Department of Chemistry, State University of New York at Buffalo Buffalo, Buffalo, NY, 14260-3000, USA
- SO Journal of Organic Chemistry (1997), 62(4), 1095-1105 CODEN: JOCEAH; ISSN: 0022-3263
- PB. American Chemical Society
- DT Journal
- LA English
- OS CASREACT 126:171751

GI

BocN
$$R3$$
 CO_2R Me Me $R4 =$

As series of enantiomerically enriched tropanes, e.g. I [R = CHMeCO2Et-(S), R1-R3 = H; R1 = Me, CH2OSiMe2CMe3, Ph, Ac, R2 = R3 = H; R1 = R3 = Me, R2 = H; R1 = R3 = H, R2 = Me; R1R2 = (CH2)4, R3 = H; R = R4, R1-R3 = H], was synthesized by the rhodium(II) octanoate-catalyzed reaction of various N-BOC-protected pyrroles with vinyldiazomethanes. The overall [3 + 4]-annulation occurs by a tandem cyclopropanation/Cope rearrangement. Asym. induction was best achieved in these transformations by using either (S)-lactate or (R)-pantolactone as a chiral auxiliary on the vinyldiazomethanes. Reactions carried out with the chiral catalyst tetrakis[N-(4-tert-butylbenzenesulfonyl)-L-prolinato]dirhodium provided moderate asym. induction, but also resulted in the formation of isomeric azabicyclooctane side products. The utility of the synthetic process was demonstrated through the asym. synthesis of (-)-anhydroecgonine Me ester and (-)-ferruginine.

IT 186898-85-1P 186898-91-9P 186899-10-5P 186899-18-3P 186899-19-4P 186899-20-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(asym. synthesis of tropane alkaloids by rhodium carboxylate-catalyzed cycloaddns. of vinyldiazomethanes with pyrroles)

RN 186898-85-1 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2,8-dicarboxylic acid, 8-(1,1-dimethylethyl) 2-(2-ethoxy-1-methyl-2-oxoethyl) ester, $[1R-[1\alpha,2(S^*),5\alpha]]-(9CI)$ (CA INDEX NAME)

Absolute stereochemistry.

RN 186898-91-9 CAPLUS CN 8-Azabicyclo[3.2.1]oct-2-ene-2,8-dicarboxylic acid, 5-methyl-, 8-(1,1-dimethylethyl) 2-(2-ethoxy-1-methyl-2-oxoethyl) ester, [1R-[1 α ,2(S*),5 α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186899-10-5 CAPLUS

CN 4aH-Benzocyclohepten-4a,8-imine-7,10-dicarboxylic acid,
1,2,3,4,5,8,9,9a-octahydro-, 10-(1,1-dimethylethyl) 7-(2-ethoxy-1-methyl-2-oxoethyl) ester, [4aR-[4aα,7(S*),8α,9aα]]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 186899-18-3 CAPLUS

8-Azabicyclo[3.2.1]oct-2-ene-2,8-dicarboxylic acid, 3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-, 8-(1,1-dimethylethyl)
2-(2-ethoxy-1-methyl-2-oxoethyl) ester, [1R-[1α,2(S*),5α]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186899-19-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2,8-dicarboxylic acid, 3-oxo-,

8-(1,1-dimethylethyl) 2-(2-ethoxy-1-methyl-2-oxoethyl) ester, [1R,2(S),5S]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 186899-20-7 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2,8-dicarboxylic acid, 3- [[(trifluoromethyl)sulfonyl]oxy]-, 8-(1,1-dimethylethyl) 2-(2-ethoxy-1-methyl-2-oxoethyl) ester, [1R-[1 α ,2(S*),5 α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 186899-09-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(asym. synthesis of tropane alkaloids by rhodium carboxylate-catalyzed cycloaddns. of vinyldiazomethanes with pyrroles)

RN 186899-09-2 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2,8-dicarboxylic acid, 5-phenyl-, 8-(1,1-dimethylethyl) 2-(2-ethoxy-1-methyl-2-oxoethyl) ester, $[1R-[1\alpha,2(S^*),5\alpha]]-$ (9CI) (CA INDEX NAME)

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:599890 CAPLUS

DN 125:294843

TI One-step esterification of benzoylecgonine with dimethylformamidedipropylacetal or dimethylformamide-diisopropylacetal in the presence of pyridine

AU Paul, Buddha D.; Dreka, Catherine; Summers, Jacqueline L.; Smith, Michael L.

CS Division Forensic Toxicology, Office Armed Forces Medical Examiner, Armed Forces Institute Pathology, Rockville, MD, 20706, USA

SO Journal of Analytical Toxicology (1996), 20(6), 506-508 CODEN: JATOD3; ISSN: 0146-4760

PB Preston Publications

DT Journal

LA English

As imple procedure was developed to derivatize benzoylecgonine extracted from urine for subsequent confirmation by gas chromatog.-mass spectrometry. The compound was esterified with dimethylformamide-dipropylacetal (DMF-DPA) or dimethylformamide-diisopropylacetal (DMF-DIPA) to the corresponding Pr and iso-Pr esters. The optimum reaction condition was found to be heating the reaction mixture in the presence of pyridine at 100°C for 30 min. The procedure is a one-step esterification followed by evaporation of excess reagents. When benzoylecgonine was extracted from urine using a solid-phase extraction technique and derivatized with this procedure, the compound was detected at a level as low as 10 ng/mL. Quantitation was linear over the concentration range 10-8000 ng/mL.

IT 128429-28-7 182759-76-8

RL: ANT (Analyte); ANST (Analytical study)
(esterification of benzoylecgonine with dimethylformamidedipropylacetal or dimethylformamide-diisopropylacetal in the presence
of pyridine)

RN 128429-28-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2,2,3,3,3-pentafluoropropyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c}
R & O & CF_3 \\
Me & N & S & O & F & F
\end{array}$$

RN 182759-76-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester, [1R-(exo,exo)]- (9CI) (CA

INDEX NAME)

L5 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:389079 CAPLUS

DN 125:78734

TI Elimination of fluconazole interference in gas chromatography/mass spectrometric confirmation of benzoylecgonine, the major metabolite of cocaine using pentafluoropropionyl derivative

AU Dasgupta, Amitava; Mahle, Christina; McLemore, Jerri

CS Health Sciences Center, University New Mexico, Albuquerque, NM, USA

SO Journal of Forensic Sciences (1996), 41(3), 511-513 CODEN: JFSCAS; ISSN: 0022-1198

PB American Society for Testing and Materials

DT Journal

LA English

AB Cocaine is a widely abused drug and causes death from overdose. Benzoylecgonine, the major metabolite of cocaine in urine is usually confirmed after derivatization by gas chromatog./mass spectrometry to demonstrate cocaine abuse. Recently, Wu et al. demonstrated that fluconazole coelutes with benzoylecgonine after conversion to trimethylsilyl analogs and causes false-neg. result in the confirmation test. However, fluconazole did not interfere with the screening assay using an enzyme multiplied immunoassay technique. We demonstrated that by converting benzoylecgonine to the corresponding pentafluoropropionyl derivative, the interference of fluconazole can be completely eliminated. pentafluoropropionyl derivative of benzoylecgonine eluted at 14.7 min while the derivatized fluconazole eluted at 15.6 min. The mass spectral fragmentation pattern of derivatized benzoylecgonine was distinctively different from the mass spectral features of derivatized fluconazole in both electron ionization and chemical ionization mode of operation of mass spectrometers. The quantitation of benzoylecgonine in pos. urine specimens was not affected when the specimens were supplemented with 50 μq/mL of fluconazole.

IT 128429-28-7

RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)

(fluconazole interference in GC/MS confirmation of benzoylecgonine)

RN 128429-28-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2,2,3,3,3-pentafluoropropyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

L5 ANSWER 22 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:224930 CAPLUS

DN 124:311292

TI In vivo evaluation of [11C] - and [18F] - labeled cocaine analogs as potential dopamine transporter ligands for positron emission tomography

AU Wilson, Alan A.; DaSilva, Jean N.; Houle, Sylvain

CS FACULTY MEDICINE, UNIVERSITY TORONTO, Toronto, ON, M5T 1R8, Can.

SO Nuclear Medicine and Biology (1996), 23(2), 141-6 CODEN: NMBIEO; ISSN: 0883-2897

PB Elsevier

DT Journal

LA English

AB Four analogs of the potent dopamine transporter liqand, WIN 35,428, were radiolabeled with 11C and 18F at the 2- β -carboxy position for evaluation as potential ligands for imaging dopamine uptake sites by positron emission tomog. (PET) namely, Me (1R-2-exo-3-exo)-8-methyl-3-(4methylphenyl)-8-azabicyclo[3.2.1]octane-2-carboxylate (RTI-32), its 4-chlorophenyl analog (RTI-31), 2'-fluoroethyl (1R-2-exo-3-exo)-8-methyl-3-(4-methylphenyl)-8-azabicyclo[3.2.1]octane-2-carboxylate (FETT) and its 4-chlorophenyl analog (FECT). Upon i.v. injection in rats, all four radiotracers displayed preferential accumulation of radioactivity in regions known to contain high concns. of dopamine uptake sites. Competition studies with two of the analogs, [11C]RTI-32 and [18F]FETT, demonstrated that, for both radiotracers, binding was saturable and displayed the appropriate pharmacol. as potential PET ligands for imaging the dopamine transporter. Striatum to cerebellar ratios for [11C]RTI-32 (at 90 min post-injection) and [18F] FETT (at 120 min post-injection) were 27 and 21, resp.

IT 170163-94-7 170163-95-8

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) ([11C] - and [18F] - labeled cocaine analogs in vivo evaluation for potential PET of dopamine transporter in brain)

RN 170163-94-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, 2-(fluoro-18F)ethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 170163-95-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, 2-(fluoro-18F)ethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 23 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:1004551 CAPLUS

DN 124:135375

TI Suppression of psychoactive effects of cocaine by active immunization

AU Carrera, M. Rocio A.; Ashley, Jon A.; Parsons, Loren H.; Wirsching, Peter; Koob, George F.; Janda, Kim D.

CS Dep. Neuropharmacology Dep. Mol. Biol. Chem., Scripps Res. Inst., La Jolla, CA, 92037, USA

SO Nature (London) (1995), 378(6558), 727-30 CODEN: NATUAS; ISSN: 0028-0836

PB Macmillan Magazines

DT Journal

LA English

AB Cocaine is a powerfully addictive substance and new strategies are needed to treat its abuse. Generating an active immunization to cocaine offers a means of blocking the actions of the drug by preventing it from entering the central nervous system, and should have fewer side effects than treatments based on manipulation of central neurotransmitter function. The design and preparation of a cocaine immunogen requires special regard for the stability of cocaine both free and as a haptenic determinant.

Immunochem. and a well defined behavioral model were brought together to address the problem of inactivation of the psychostimulant actions of cocaine. The authors report here that active immunization with a new, stable cocaine conjugate suppressed locomotor activity and stereotyped behavior in rats induced by cocaine but not by amphetamine. Moreover, following acute injection of cocaine, levels of cocaine in the striatum and cerebellum of the immunized animals were lower than those of control animals. These results suggest that immunopharmacotherapy may be a promising means by which to explore new treatments for cocaine abuse.

IT 173443-27-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(conjugates with keyhole limpet hemocyanin, immunization with; suppression of psychoactive effects of cocaine and brain levels by active immunization with cocaine immunoconjugate)

RN 173443-27-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 5-carboxypentyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 173443-25-9P 173443-26-0P 173443-27-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; suppression of psychoactive effects of cocaine and brain levels by active immunization with cocaine immunoconjugate)

RN 173443-25-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-hydroxy-8-methyl-, 6-oxo-6-(phenylmethoxy)hexyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

RN 173443-26-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 6-oxo-6-(phenylmethoxy)hexyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 173443-27-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 5-carboxypentyl ester, (1R,2R,3S,5S)- (9CI) (CA INDEX NAME)

- L5 ANSWER 24 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 1995:966992 CAPLUS
- DN 124:106527
- TI Generation of polyclonal catalytic antibodies against cocaine using transition state analogs of cocaine conjugated to diphtheria toxoid
- AU Basmadjian, Garo P.; Singh, Satendra; Sastrodjojo, Budiono; Smith, Blaine T.; Avor, Kwasi S.; Chang, Fengchun; Mills, Stanley L.; Seale, Thomas W.
- CS Coll. Pharmacy, Univ. Oklahoma Health Sci. Cent., Oklahoma City, OK, 73117, USA
- SO Chemical & Pharmaceutical Bulletin (1995), 43(11), 1902-11 CODEN: CPBTAL; ISSN: 0009-2363
- PB Pharmaceutical Society of Japan
- DT Journal
- LA English
- AB Six novel transition state analogs (TSAs) of cocaine and one non-cocaine, p-aminophenylphosphonyl ester of cyclohexanol, were prepared and characterized by 1H- and 13C-NMR and FAB-MS, (1R)-ecgonine Me ester or cyclohexanol were subjected to phenylphosphonylation in the presence of

dicyclohexyl carbodiimide and 4-N,N-dimethyl aminopyridine. TSA-IV, however, was prepared from norcocaine which was protected with dibromoethane before acid hydrolysis, esterification and phenylphosphonylation were carried out. TSA-III, and TSA-I using various length spacer arms, were coupled with the immunogenic protein, diphtheria toxoid (DT). The TSAs coupled with DT were used to immunize mice and after appropriate boosts their sera were tested for the presence and titer of anti-TSA polyclonal antibodies using ELISA. The mice immunized with these TSAs produced high titers of polyclonal catalytic antibodies, except for 1 compound, with the ability to hydrolyze the substrate 125I-4'-iodococaine in an in vitro assay, even in the presence of noncatalytic anti-TSA antibodies.

IT 172954-58-4DP, reaction products with diphtheria toxoid RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(generation of polyclonal catalytic antibodies against cocaine using transition state analogs)

RN 172954-58-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(hydroxyphenylphosphinyl)oxy]-8-methyl-, anhydride with
N-[3-(dimethylamino)propyl]-N'-ethylcarbamimidic acid, monohydrochloride,
[1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

● HCl

IT 172954-58-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(generation of polyclonal catalytic antibodies against cocaine using transition state analogs)

RN 172954-58-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3[(hydroxyphenylphosphinyl)oxy]-8-methyl-, anhydride with
N-[3-(dimethylamino)propyl]-N'-ethylcarbamimidic acid, monohydrochloride,
[1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

HCl

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L5 ANSWER 25 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 1995:701536 CAPLUS

DN 123:339691

TI Synthesis of two radiofluorinated cocaine analogs using distilled 2-[18F] fluoroethyl bromide

AU Wilson, Alan A.; Dasilva, Jean N.; Houle, Sylvain

CS Dep. Psychiatry, Univ. Toronto, Toronto, ON, M5T 1R8, Can.

SO Applied Radiation and Isotopes (1995), 46(8), 765-70 CODEN: ARISEF; ISSN: 0969-8043

PB Elsevier

DT Journal

LA English

AB Two fluorinated congeners of cocaine, 2'-fluoroethyl (1R-2-exo-3-exo)-8-methyl-3-(4-methylphenyl)-8-azabicyclo[3.2.1]octane-2-carboxylate (FETT) and its 4-chlorophenyl analog (FECT) were synthesized. Radiolabeling with 18F was achieved by 0-[18F]fluoroalkylation of the corresponding carboxylic acid salts with distilled 2-[18F]fluoroethyl bromide in DMF. After HPLC purification, yields of radiochem. pure, formulated products were 22-30% (not corrected for decay) in a synthesis time of 60-70 min. The use of distilled 2-[18F]fluoroethyl bromide was indispensable for the reliable production of pure products.

IT 170163-96-9P 170163-97-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of cocaine analogs)

RN 170163-96-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, 2-fluoroethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 170163-97-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, 2-fluoroethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 170163-94-7P 170163-95-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of radiofluorinated cocaine analogs using distilled 2-[18F]fluoroethyl bromide)

RN 170163-94-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-, 2-(fluoro-18F)ethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 170163-95-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-chlorophenyl)-8-methyl-, 2-(fluoro-18F)ethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L5 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 1994:656105 CAPLUS

DN 121:256105

TI Derivatives of benzoylecgonine, ecgonine and ecgonidine as medicines

IN Somers, Lowell M.; Wynn, James E.

PA Entropin, Inc., USA

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DT Patent

LA English

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PΙ	WO	9415	935			A1		1994	0721	1	WO 1	993-1	US12	625		19	99312	223
		W:	ΑT,	ΑU,	BB,	BG,	BR,	BY,	CA,	CH,	CZ,	DE,	DK,	ES,	FI,	GB,	HU,	JP,
			KP,	KR,	KZ,	LK,	LU,	LV,	MG,	MN,	MW,	NL,	NO,	NZ,	PL,	PT,	RO,	RU,
			SD,	SE,	SK,	UA,	US,	UZ,	VN									
		RW:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,	NE,	SN,	TD,	TG		
	US	5376	667			Α		1994	1227	Ţ	JS 1	992-	9993	07		19	99212	231

	CA 2151618	AΑ	19940721	CA 1993-2151618	19931223
	CA 2151618	С	20000801		
	AU 9460160	A1	19940815	AU 1994-60160	19931223
	AU 682677	B2	19971016		
	EP 677051	A1	19951018	EP 1994-906466	19931223
	EP 677051	B1	20011128		
	R: AT, BE, CH	H, DE, D	OK, ES, FR,	GB, GR, IE, IT, LI,	LU, MC, NL, PT, SE
	HU 72972	A2 ·	19960628	HU 1995-2008	19931223
	JP 08507751	Т2	19960820	JP 1993-516076	19931223
	JP 2938188	B2	19990823		
	PL 174826	В1	19980930	PL 1993-321837	19931223
	PL 175756	В1	19990226	PL 1993-309664	19931223
	AT 209646	E	20011215	AT 1994-906466	19931223
	PT 677051	${f T}$	20020531	PT 1994-906466	19931223
	ES 2169067	Т3	20020701	ES 1994-906466	19931223
	IL 108193	A 1	19981206	IL 1993-108193	19931227
	ZA 9309807	Α.	19940818	ZA 1993-9807	19931230
	CN 1095720	Α	19941130	CN 1993-121730	19931230
	CN 1053187	В	20000607		
	US 5559123	Α	19960924	US 1994-320050	19941007
	US 5663345	Α	19970902	US 1995-463123	19950605
	NO 9502611	Α	19950830	NO 1995-2611	19950629
	NO 313830	B1	20021209		
	HK 1012627	A 1	20021004	нк 1998-113935	19981217
PRAI	US 1992-999307	А	19921231		
	WO 1993-US12625	W	19931223		
	US 1994-320050	A 3	19941007		
os	MARPAT 121:256105				
GI					

AB The title compds. [I; R1 = (un)branched alkyl, H, alkenyl, alkynyl; R2, R3 = (un)branched (un)substituted alkyl, alkenyl, alkynyl; X = OH, SH, NH2, halogen] [II; R4 = H, (un)substituted (un)branched alkyl, alkenyl, alkynyl] (III), useful in the treatment of pain, inflammation, autoimmune diseases, allergies, arthritis, gangrene, diabetes, etc., are prepared Thus, cocaine base was heated in an aqueous solution of propylene glycol, producing benzoylecgonine, ecgonine, ecgonidine, 2-hydroxypropylecgonine, 2-hydroxypropylecgonine, and 2-hydroxyporpylecogonidine, and this mixture was successfully used in the treatment of patients suffering from a variety of the above-mentioned

illnesses.

IT 157770-50-8P 157770-51-9P 157770-52-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as pharmaceutical)

RN 157770-50-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2-hydroxypropyl ester (9CI) (CA INDEX NAME)

RN 157770-51-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-hydroxy-8-methyl-, 2-hydroxypropyl ester (9CI) (CA INDEX NAME)

$$\begin{tabular}{c|c} O & OH \\ || & | \\ C-O-CH_2-CH-Me \\ \end{tabular}$$
 Me OH

RN 157770-52-0 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-, 2-hydroxypropyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{O} & \text{OH} \\ \parallel & \parallel \\ \text{C-O-CH}_2\text{--CH-Me} \end{array}$$
 Me

L5 ANSWER 27 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:451978 CAPLUS

DN 113:51978

TI Variations in abundance of the molecular ion of the derivatized cocaine metabolite benzoylecgonine

AU Bodor, Geza; Roggeman, Robert; Turk, John

CS Sch. Med., Washington Univ., St. Louis, MO, 63110, USA

SO Clinical Chemistry (Washington, DC, United States) (1990), 36(5), 742-7 CODEN: CLCHAU; ISSN: 0009-9147

DT Journal

LA English

Benzolecgonine (BEG) is the principal urinary metabolite of cocaine. For AB forensic drug testing, the presence of BEG in urine, suggested by a pos. result for a screening immunoassay, must be confirmed by quant. gas chromatog./mass spectrometric (GC/MS) anal., i.e., stable isotope dilution with a deuterium-labeled internal standard GC/MS criteria for positivity also require appropriate relative abundances of qualifier ions, including the mol. ion, but there is little published information on the observed absolute values for qualifier ion ratios or on the variability of these values. This lack of information creates uncertainty for labs. initiating programs testing urine for drugs of abuse as to performance criteria for run acceptability and sample positivity. The authors have observed substantial variability (CV = 50%) in the abundance of the mol. ion of derivatized BEG relative to the base ion in reference materials. This variability can result in a high rate of repetition of runs and generate confusion in the defense of forensic drug-testing results. Normalization of the abundance of the mol. ion of derivatized BEG to that of the deuterium-labeled internal standard in the same sample greatly reduces the apparent variability in this measurement; it is also more reliable than the absolute value of the relative abundance of the mol. ion in determining run acceptability and pos. or neg. results for a sample.

IT 128429-28-7

RL: ANT (Analyte); ANST (Analytical study)

(determination of, in human urine by GC/mass spectrometry in forensics)

RN 128429-28-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, 2,2,3,3,3-pentafluoropropyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 28 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1977:5653 CAPLUS

DN 86:5653

TI Radiosynthesis of (-)-cocaine and nor-(-)-cocaine using tritium-labeled methanol

AU Just, Wilhelm W.; Werner, Gottfried

CS Max Planck Inst. Hirnforsch., Arbeitsgruppe Neurochem., Frankfurt/Main, Fed. Rep. Ger.

SO Journal of Labelled Compounds and Radiopharmaceuticals (1976), 12(2),

281-5

CODEN: JLCRD4; ISSN: 0362-4803

DT Journal LA English

GΙ

AB Hydrolysis of (-)-cocaine and (-)-norcocaine gave (-)-O-benzoylecgonine and (-)-O-benzoylnorecgonine, resp., which were converted to the corresponding acid chlorides and then treated with C3H3OH in MeCN to give 3H labeled cocaine and norcocaine (I; R = Me, H, resp.) with specific activity 90 and 38 mCi/mole, resp. I (R = H) was converted to its 1-N-dimethylaminonaphthalene-5-sulfonyl derivative

IT 61194-40-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 61194-40-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-, trifluoromethyl ester, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)